

THE IBIS.

SIXTH SERIES.

No. XV. JULY 1892.

XXIX.—*On the Birds of East Prussia.*

By ERNST HARTERT.—Part I.

It is my hope that it will not be without interest for the readers of 'The Ibis' to peruse some short remarks on the birds of a part of Germany which I tried for several years to explore, and which is still not only the least known of all parts of Germany, but also the most interesting one as regards its ornithology. This latter statement is proved to be beyond doubt when I mention the names of three birds which *regularly breed* in East Prussia—*Carpodacus erythrurus*, *Nucifraga caryocatactes*, and *Syrnium uralense*, all of which I have had opportunities of observing in their breeding-haunts.

So little is generally known about the birds of East Prussia that English ornithologists, in their writings, hardly ever recognize the existence of this large province, so full of bird-life. Even Mr. Seebohm, in his great work, 'A History of British Birds,' which contains so many good notes about German birds from the author's own experience, generally ignores that country. Thus, for instance, he states that *Aquila naevia* "breeds in North Germany from Hanover to Danzig," while this bird is equally or

more common east of Danzig, throughout East Prussia, an area of 14,280 square miles. Again, in 'The Birds of the Japanese Empire,' he gives Pomerania as the habitat of his *Sitta caesia homeyeri*, whereas it is found in the extreme east of Prussia, but not in Pomerania.

As would be anticipated, East Prussia, in consequence of its north-eastern situation, is the home of several species of birds that do not regularly occur in other parts of Germany.

The ornis of East Prussia is that of the plains, no mountains of considerable height rising in this province, and even the Galtgarben and the Gonscha Gora being too low to have any appreciable influence on the ornis.

Water abounds; the most northern end of the province and the tract called the Samland, *i. e.* the country north of Königsberg and Pillau, border the Baltic Sea, but the greater part of the coast-line does not quite extend to the sea. There are situated the vast freshwater-basins known as the Kurische and the Frische Haff, formed by the rivers Niemen and Pregel. These are separated from the sea by a narrow line of land, the Kurische and the Frische Nehrung, mostly consisting of shifting sand-downs, but partly covered by forest. In the southern and south-eastern parts of the province are a great number of smaller and several large lakes, the largest being the Spirding and the Mauersee. Of the rivers only the Niemen and the Pregel are worth mention. The soil is very variable: along the sea-shore and in great tracts, especially of the south, it is dry sand, thickly covered with pine-forest, whilst in other parts the soil is rich, heavy, and fertile, presenting to view fields, meadowy grounds, and often also swamps, forests of fir, of *Populus tremula*, *Carpinus betulus*, oak and birch, and swampy woods of *Alnus glutinosa*. Many of the fir-forests of Masuren* were almost primeval till nearly forty years ago, when the caterpillars of *Lasiocampa monucha* ravaged them, and by their ravages made them much more accessible to the visitor. But even now vast forests are found, where no whistle of trains or of manufactories sounds through the

* Masuren (or Masovia) is the south-eastern district of East Prussia.

air, and where the cries of the Eagle and the Peregrine Falcon are more familiar than the shouts of men.

This variety of scenery in connection with the comparatively sparse population (only 138 to the square mile) supplies the necessary conditions of life for many animals. Every winter wolves pay unwelcome visits to the forests near the Russian frontier; not very long ago the lynx did the same (see Altum, 'Forstzoologie,' vol. i., and Hartert, 'Feinde der Jagd,' p. 118), and even now the forests on the Kurische Naff and round the Zehlau-Bruch are the home of the huge Elk.

The north-eastern character of the fauna is obvious in all the orders of animals, as is proved by the occurrence of such forms as *Carabus menetriesi* and *Dytiscus lapponicus*, for instance, among the beetles, *Argynnis laodice* and others among the lepidoptera, and *Lepus variabilis* among the mammals.

So early as in the past century there were published many notes about the birds of East Prussia. The writings of the ornithologist J. T. Klein, 1760-1766, contain many notes from the eastern parts of Prussia, and a long and interesting list of the birds inhabiting Prussia is given in Bock's "Preussische Ornithologie," in the 'Naturforscher' of 1776, 1778, and 1779. Of course there are many mistakes in these old works; some names, many of which are not binomial, are unintelligible, and many even common species, especially among the small birds, are not noticed. Subsequently to these old authorities there have been published many useful notes about the ornis of East Prussia, though many more about West Prussia, and lists of the birds inhabiting both provinces, are given by Ebel (1823) and by Rathke (1846). But no recent attempt has been made to furnish a complete list of the birds that at present inhabit this country, except by the writer of this article, who published in the 'Mittheilungen des ornithologischen Vereins in Wien,' 1887, a list of the birds of East and West Prussia under the title "Vorläufiger Versuch einer Ornis Preussens." This article was published during my trip to Sumatra and India,

and inconveniently scattered over many numbers of the periodical. Since its publication a few other observers have visited that country, specimens of some of the interesting species have reached the Berlin Museum, notes have been published here and there in German periodicals, and I have received from time to time notes from reliable friends, as well as eggs and specimens in the flesh, especially from my friend the Royal Forester Wels. Many of my notes of 1887 must therefore now be extended or altered. Lastly, I may mention that during my stay in East Prussia I not only "observed" birds, but carefully collected both skins and eggs, from those of the common Finches to those of the rare Owls and Eagles; that I have compared these carefully with specimens from other parts of Germany; and that while most of the skins are in the large collection of the late E. F. von Homeyer, most of the eggs remain in my own possession.

The following list contains the species that at present undoubtedly inhabit East Prussia, or certainly occur there as migrants.

AËDON PHILOMELA (Bechst.).

The large Eastern Nightingale is very common in East Prussia wherever it finds leafy woods with plenty of undergrowth, gardens, or swampy tracts and forests of *Alnus glutinosa*. It is absent from the pine-wood districts of the south-east.

(*Aëdon lusciniæ*, the Common Nightingale, does not occur east of the Vistula. In some cases it has been recorded erroneously.)

The eggs of the Eastern Nightingale are, as a rule, somewhat larger than those of the smaller form, but many are undistinguishable, and I have come across eggs of *A. lusciniæ* that exceed in size any I have seen of *A. philomela*.

I do not know whether a series of *A. philomela* from East Prussia and Poland has ever been carefully compared with specimens from Southern Hungary. I am not at all sure that they all belong to one subspecies.

CYANECULA WOLFI, Brehm.

The White-spotted Blue-throat is rather rare. When I came to East Prussia from Silesia, where it is very numerous in the willows on the Oder, I looked in vain for this lovely bird. At present I know only two places where it occurs, and no doubt breeds, although it is probably present in many other localities also.

CYANECULA SUECICA (L.).

The Arctic Blue-throat occurs on migration in autumn, but is not at all common, as it is in Western Germany, during this period.

ERITHACUS RUBECULA (L.).

Breeds commonly, and passes through on migration in great numbers, especially at the end of March and in autumn.

RUTICILLA PHENICURUS (L.).

Arrives in April; last seen at the beginning of October. Very numerous during migration in September.

RUTICILLA TITYS (L.).

Rare. It breeds in very small numbers in some brick-kilns near Königsberg and in the S.W. of the province. It has lately been observed in the midst of the town of Königsberg.

SAXICOLA ŒNANTHE (L.).

Common. Once I found a clutch of eggs that were all about one third smaller than the eggs of this bird usually are.

PRATINCOLA RUBETRA (L.).

Common.

(*Pratincola rubicola* has never been observed in East Prussia. In the J. f. O. 1885, p. 91, this species was given as an inhabitant of East Prussia; but the observation cannot be relied on, since specimens were not procured.)

TURDUS MUSICUS, L.

Common in the breeding-season, and passing through in great numbers.

TURDUS ILIACUS, L.

The northernmost part of East Prussia, near the fortress of Memel, is perhaps the only place in Germany where this Thrush used to breed regularly; and there is every reason to believe that it does so at the present time. About fourteen years ago it was not very rare there, and several nests and eggs were obtained, the latter being now almost all in the late E. von Homeyer's collection and in my own. In a few cases it has been found breeding in Germany out of East Prussia, but these are probably exceptions. It passes through in enormous numbers, chiefly in October and the first half of April, but is not seen in winter.

TURDUS VISCIVORUS, L.

Breeds regularly twice a year, but not in large numbers.

TURDUS PILARIS, L.

Breeds regularly, sometimes in single pairs, but more often in society. There is no reason whatever to doubt that these birds have always been pretty common. They were breeding here about a hundred years ago, but nowadays they seem to have become rather less numerous.

(TURDUS VARIUS, Pall.)

I know of two occurrences of this bird in West Prussia, near to East Prussia. One, killed near Elbing in September 1812, is in the museum at Königsberg, and the wings of the other, killed in 1879, are preserved in the same museum.)

(TURDUS SIBIRICUS, Pall.)

A female, killed late in September 1851 near Elbing, West Prussia, is in the Homeyer collection.)

TURDUS TORQUATUS.

Much rarer than in Western Germany. It occurs singly and rarely as a migrant in October.

TURDUS MERULA.

This bird, which is so familiar in most of the towns of West Germany, is not at all common in East Prussia, and does not breed in towns and villages. It is a somewhat shy

and rare inhabitant of the outskirts of forests and smaller woods, and only in winter comes into the gardens. It is, however, not a distinct form, specimens agreeing with those of other countries.

(*TURDUS ATRIGULARIS*.)

May occur occasionally as a rare visitor, as it has been found twice near Elbing and Danzig.)

PHYLLOSCOPUS RUFUS (Bechst.).

Arrives first of its congeners, and breeds first, but regularly rears a second brood. Passes through in great numbers until October.

PHYLLOSCOPUS TROCHILUS (L.).

Almost equally common with *P. rufus*. Arrives a little later.

PHYLLOSCOPUS SIBILATOR (Bechst.).

Arrives latest of its congeners. Common in the larger woods, and even in the dry pine-forests. Passes through in great numbers, but I have not seen it later than September.

HYPOLAIS HYPOLAIS (L.).

Common.

LOCUSTELLA NÆVIA (Bodd.).

Not rare in the northern and north-eastern parts. Its remarkable locustelline song can be heard all night long, best in morning and evening, but also often in the middle of the day. In autumn it is found during migration in low bushes and in potato-fields or amongst other low crops.

LOCUSTELLA FLUVIATILIS (Wolf).

Has been shot at Ibenhorst, near the Kurische Haff, where it seems to be not very rare in summer. Although I often heard its song when a boy in Silesia, I did not meet with this bird elsewhere in East Prussia. Recently, however, it has been obtained on the Kurische Nehrung and near Pillau by Herr Lindner. The song of *L. fluviatilis* (which Herr von Middendorff, I, and other members of the Congress at Budapest heard in the swampy forests near the Hansag, in

Hungary) cannot be mistaken for that of *L. naevia*, as it is composed of *two* syllables, while that of the latter is continued much longer and in *one* syllable. The song of *L. luscinoides* was common—though not heard by many, and declared to be the voice of a large grasshopper by one person (it was May!)—among the endless reeds of the Hansag, in Hungary. Since I had not heard the note of any *Locustella* during several years, I at first believed the songster to be *L. naevia*, but from the nature of the locality I knew that that was almost impossible. The song of *L. luscinoides*, however, can without difficulty be distinguished from that of *L. naevia* by being shorter, deeper, and not so loud and shrill.

The occurrence of *L. luscinoides* in East Prussia has recently been announced at a meeting of the German Ornithological Society in Berlin, but cannot be taken for granted until some ornithologist has verified the statement by examining the bird, if a specimen has been procured at all.

ACROCEPHALUS AQUATICUS (Gm.).

I have only once shot a specimen near the Frische Haff and observed it twice in August. It is probably less rare than it is believed to be.

ACROCEPHALUS SCHÆNOBÆNUS, L. (= *phragmitis*).

Common. Arrives at the end of April. The nest is always placed close to, but not exactly on, the ground.

ACROCEPHALUS STREPERUS (Vieill.).

Common in suitable places.

ACROCEPHALUS ARUNDINACEUS (L.) (= *turdoides*).

The Great Reed Warbler is very common where *Arundo phragmites* abounds. The nest is usually placed among the reeds, but I found it occasionally fixed to the twigs of willows, and a case is known where it was high up in a birch tree. A favourite food of the Great Reed Warbler is reed-beetles (*Donacia phragmitis*, *D. sericea*, and allied species), which are frequently found in its stomach.

ACROCEPHALUS PALUSTRIS (Bechst.).

Not rare in suitable localities, but not very numerous.

ACROCEPHALUS FRUTICOLA (Naum.).

In July 1882 I saw a pair of a species of *Acrocephalus* in the bushes, intermixed with reeds, grass, *Epilobium*, and other plants, that bordered a little ditch running through some swampy meadows near Königsberg. I took them for *A. palustris*, but something in the song of the male seemed to me peculiar, and therefore I shot it and searched for the nest, but unsuccessfully. Without material to compare, I was convinced that I had a specimen of *A. palustris* in hand, but afterwards E. von Homeyer, to whom I sent the specimen with other skins, identified it as *A. horticola*, Naumann. Homeyer described this very skin in A. & R. Müller's 'Thiere d. Heimath,' ii. p. 585, and I again in 'Mitth. d. ornithol. Vereins in Wien,' 1887, in "Versuch einer Ornith. Preussens," no. 96. When I compared the skin with others in Homeyer's collection, I became convinced that it is a distinct form which has been generally confounded with *A. palustris* and *A. streperus*.

True *A. streperus* is often observed breeding in gardens and parks in towns, far from any water or reeds; to these birds the name of *A. horticola* has been applied, at the same time with the admission that they differ in nothing but their abode. This is not a distinct form, but merely consists of individuals that forsake their usual breeding-grounds and frequent localities not usually resorted to by their kindred.

This I believe to be a misapplication of Naumann's name, and it has probably been the reason why the existence of any other form has been so readily denied.

The name *Sylvia (Calamioherpe) horticola* (which I cannot find even as a synonym in the rather exhaustive synonymies in Dresser's 'B. of Europe,' nor in Seebohm's vol. v. of the 'Catalogue of Birds') was proposed by Naumann for the two subspecies of C. L. Brehm, which Naumann believed to be identical, but distinct from both *A. streperus* and *A. palustris*. Besides *C. horticola*, Naumann described and figured on the same plate (370), in vol. xiii. of his great work, a *C. fruticola*.

All modern ornithologists have passed over these forms

rather contemptuously, but in my opinion, when larger material of *A. palustris* and *A. streperus* and their allies from different localities has been collected and studied over again, the result will probably be the discovery of several subspecies or even species. At least I believe that there is one form distinct from both the Marsh Warbler and the small Reed Warbler, which seems to stand somewhat between these two common species. Probably Brehm's subspecies, *A. arbustorum* and *A. pinetorum*, as well as Naumann's *A. horticola* and *A. fruticola*, are all referable to this one form, which is an inhabitant of swamps rather than of gardens. At present I am not able to make this out for certain, but I wish to call the attention of those who may be in possession of sufficient material to this group of species.

SYLVIA ATRICAPILLA (L.).

Very common.

SYLVIA HORTENSIS, Bechst.

Not rare, but far less numerous than *S. atricapilla*.

SYLVIA SYLVIA (L.) (= *cinerea*).

Very common.

SYLVIA NISORIA (Bechst.).

This species is very common all over the province in suitable localities. The eggs are laid in the last part of May and the beginning of June. Once I found a clutch with all the eggs spotted with deep chestnut-brown.

SYLVIA CURRUCA (L.).

Not rare, but less common than in Silesia and Western Germany.

ACCENTOR MODULARIS (L.).

This bird is very rare, probably not breeding, and only a straggler. I have seen only one specimen, that had been shot during very unusual and severe weather in spring. It has been lately recorded as occurring near Norkitten (*Robitzsch*).

ANORTHURA TROGLODYTES (L.).

Common at all seasons.

CINCLUS CINCLUS (L.).

The black-bellied form of the Dipper, the *C. melanogaster* of most writers, which is no doubt the *Sturnus cinclus* of Linnæus, is a very rare visitor in autumn and winter. I have never noticed the Dipper in summer, but Herr Talke informs me that he found it breeding on the Goldap river, a small tributary of the Pregel, which descends rapidly from the little plateau of the "Rominter Heide." Whether these breeding birds belong to the northern subspecies or to *Cinclus merula* is uncertain. I have not seen specimens.

ACREDULA CAUDATA (L.).

Breeds, but is much more numerous during the winter. Only the true *A. caudata*, without any superciliary stripe, occurs.

PARUS MAJOR, L.

PARUS CÆRULEUS, L.

PARUS CRISTATUS, L.

All three are common throughout the year, the former two everywhere, the last in forests, especially in those consisting of pine.

PARUS ATER, L.

Not common, and only met with in fir-forests.

PARUS PALUSTRIS, L.

The Marsh-Tit is common in East Prussia, and may be seen all the year round. I have used the name *Parus palustris* for the common Marsh-Tit of Central Europe, but probably this name should be restricted to the northern form, the *Parus borealis* of most authors. In this case the form of Central Europe must be called *Parus fruticeti*, Wallgr., and the English form, which is slightly different, *Parus fruticeti dresseri*.

Reichenow (Syst. Verz. Vög. Deutschl. p. 11 (1889)) states that the Northern Marsh-Titmouse occasionally visits East Prussia. I have never seen a specimen, but it is not at all surprising that in winter some of the northern birds should visit this country, while the common form is certainly the only one that breeds here. Taczanowski gives the northern form also as a rare winter visitor in Poland.

PARUS CYANUS, Pall.

On the 1st of January, 1880, when walking through the wood close to the fortress of Pillau, I saw among a party of *Parus cæruleus*, mixed with some other Tits, a specimen of an entirely white and blue Titmouse, which could have been nothing else but *Parus cyanus*. It being a holiday and shooting not being allowed, I rushed home and brought back with me an almost noiseless little pistol, with which I could shoot in spite of the many visitors who enjoyed the beautiful afternoon in the wood. I met with the bird about 200 yards from the previous spot and shot at it, but merely wounded it and—lost it. This very sad record is the only evidence I can give about this bird; but, as it has occurred in Silesia and in Poland, there is no reason why it should not straggle occasionally into Prussia.

SITTA CÆSIA HOMEYERI, Seeb. (—)

There is a good series of Nuthatches from East Prussia in the late E. F. von Homeyer's collection, which I collected for him in various parts of the province to complete his material for an intended but never-published article on this group.

The Nuthatches of East Prussia differ from those of other parts of Germany, or I may rather say from the common form of the Nuthatch of Central and Southern Europe and England, in the much lighter, almost pure white, colour of the breast, and approach the pale *Sitta uralensis* of Siberia and *Sitta europæa* of Scandinavia. They may be regarded as being more nearly allied to *Sitta uralensis* and *Sitta europæa*, but sometimes assimilate to the Western *Sitta cæsia*.

These differences have been noticed by me (*l. c.* no. 65), but I did not venture to name this form. Taczanowski has also described the coloration of the *Sitta* in Poland ('Ornis,' 1888, p. 454).

One of the skins that I had collected for Herr von Homeyer came into the collection of Mr. Seeböhm, who has named it *Sitta cæsia homeyeri*, a name that must stand for it, as it is a tolerably well-marked subspecies. The distribution

of this form, as given by Mr. Seebohm, is Pomerania, the Baltic Provinces of Russia, Poland, and the Crimea. As regards Pomerania this is not correct. Homeyer's collection contains specimens of it from East Prussia only; those from Pomerania belong to the true western *Sitta casia*. The mistake probably arose from my giving the localities on the labels too exactly, quoting small places not known abroad, instead of better-known and more general terms.

REGULUS REGULUS (L.).

The Golden-crested Wren is very common during the winter, but only a small number remain in the forests to breed.

(I never met with *Regulus ignicapillus*, nor do I know of a verified occurrence of this bird in East Prussia.)

CERTHIA FAMILIARIS, L.

Common throughout the year. Only the true *C. familiaris*, with a pure white breast, occurs.

MOTACILLA ALBA, L.

Very common. The weather in East Prussia is too severe to allow them to remain during the winter.

MOTACILLA FLAVA, L.

Very common.

(The statements that "*M. sulphurea*" and "*M. citreola*" are met with in the breeding-season are best passed over in silence.

Probably *Motacilla borealis* will be found on passage, but I never saw it.)

ANTHUS PRATENSIS (L.).

March to October. Breeds in many suitable localities.

ANTHUS TRIVIALIS (L.) (= *arboreus*).

Common from April to September.

ANTHUS CAMPESTRIS (L.).

Although the many sandy desert-like tracts would be suitable localities for this Pipit, it is rather rare. I met

with it in a few localities in the east, south-east, and north-west of the province.

ALAUDA ARBOREA, L.

Common in pine-forests, or rather in more open places in the forest.

ALAUDA ARVENSIS, L.

Although I heard Sky-Larks singing on bright days after the 20th of February, I do not think that they ever remain during the whole of the winter. No great variations in colour are perceptible, although the specimens differ somewhat according to the soil. Those from turf-moors are very dark on the upper surface, while those from bare sandy soil are as a rule paler.

GALERITA CRISTATA (L.).

Common along roads and on bare places near towns. Resident all the year round. In winter, if deep snow covers the land, it comes into the towns to feed on rubbish and horse-droppings.

OTOCORYS ALPESTRIS (L.).

I have not seen it in East Prussia, but several specimens have been procured in West Prussia near Danzig, and others in Poland; therefore it will no doubt occasionally visit the shores of East Prussia.

EMBERIZA SCHÆNICLUS (L.).

Not rare in suitable localities.

EMBERIZA PUSILLA, Pall.

A single specimen, shot many years ago near Rastenburg, East Prussia, is in Homeyer's collection.

EMBERIZA HORTULANA, L.

Although this Bunting was unknown to most of the older writers, and also was not mentioned by Boeck as occurring in West Prussia, it is quite a common bird in the greater part of East Prussia, and probably the same in West Prussia. Nevertheless it is absent in some parts. It seems to prefer the

drier sandy districts, but perhaps the reasons for its somewhat peculiar distribution are of another kind.

EMBERIZA CITRINELLA, L.

Common.

EMBERIZA CALANDRA, L. (1758) (= *E. miliaria*, L., 1766).

Not rare in the fertile districts, but scarce or mostly absent from the drier wooded parts.

PLECTROPHENAX NIVALIS (L.).

Common in winter, but somewhat less so in mild years. Usually seen going about in large flocks, and rather shy.

(CENTROPHANES LAPPONICUS has been caught near Danzig and Thorn in West Prussia, and therefore may occur as a straggler in East Prussia.)

LOXIA CURVIROSTRA, L.

This is the common Crossbill in East Prussia, and not the Parrot Crossbill, as would appear from various notes in the literature of the subject.

LOXIA CURVIROSTRA PITYOPSITTACUS, Bechst.

This is a very rare bird, but sometimes large flocks of it occur and probably some individuals remain to breed. If kept separate, it should only be regarded as a subspecies; but more information is required about these forms, which, in my opinion, are certainly not more than local races.

PYRRHULA PYRRHULA (L.).

Only the large Eastern and Northern form (the so-called *Pyrrhula major*, but no doubt the *Loxia pyrrhula*, Linn.) is found in East Prussia. It is very common during the winter, but a few remain to breed. In Western Germany the large form is only a rare winter visitor, but the form breeding there is the smaller and less brilliantly-coloured *Pyrrhula europæa*, Vieill., which is merely a subspecies of the former.

PINICOLA ENUCLEATOR (L.).

In many winters very great numbers arrive in East Prussia, while in others they are rare, and in many years not

one can be found. They are the most foolish and least shy birds in existence.

CARPODACUS ERYTHRINUS (Pall.).

East Prussia is the only part of Germany in which *Carpodacus erythrinus* is a regular breeder. The only districts in which it has been observed are the north-eastern parts, between Königsberg and Memel. Only a few places are known where it is common, and these are chiefly woods of *Alnus glutinosa* with dense undergrowth and generally with swampy ground. It arrives late in the year, and not much before the middle of May. The clutches contain the full number of eggs in about the second week of June, but fresh eggs may be found until July. The usual number of eggs is five. In one wood 17 nests were found in one year, but there are perhaps few localities where this bird is equally common. The very peculiar song of the male obtrudes itself upon one's notice. After the breeding-season these birds keep hidden in the woods. I have not noticed them later than August, but Herr Lindner writes me that he has seen them in September.

CARDUELIS CARDUELIS (L.).

Common.

CHRYSOMITRIS SPINUS (L.).

Very numerous during the winter, but few remain to breed.

ACANTHIS LINARIA (L.).

Not rare in winter, usually seen in woods of *Alnus glutinosa*. It is not known that they remain to breed, and there is no reason to believe that they do so, although I saw a single male in July 1881 near Königsberg. A flock of old and young specimens of this bird was also seen in July 1885 on the Hiddensee, off the north coast of Pomerania, and the suggestion has been made that they occasionally remain to breed. This, however, has not yet been ascertained.

ACANTHIS CANNABINA (L.).

Common. The weather is generally too severe to allow

them to remain during the whole year, but Herr Lindner has observed specimens in winter.

CHLORIS CHLORIS (L.).

Common.

FRINGILLA CÆLEBS, L.

Common. Although many remain during the winter in Western Germany, this is not the case in Prussia.

FRINGILLA MONTIFRINGILLA, L.

Common in winter, October to April.

PASSER DOMESTICUS (L.).

PASSER MONTANUS (L.).

Both common.

COCCOTHAUSTES COCCOTHAUSTES (L.).

Not rare. Nests at the end of May.

STURNUS VULGARIS, L.

Common in summer, but never seen after October. I think I have procured only one specimen during the breeding-season, and this was one of the intermediate forms between the true western *Sturnus vulgaris* and *Sturnus menzbieri*, Sharpe. This form is probably the only one that breeds in Prussia. Immense numbers used to roost among the reeds of the Haffs after the breeding-season.

PASTOR ROSEUS (L.).

Has been shot several times (1865, 1876), but is a very rare straggler.

ORIOLOUS GALBULA, L.

Very common, especially in the forests of *Alnus glutinosa*, and those consisting of *Pinus sylvestris*. Considerable individual variations in colour seem to be not rare. Several examples of these are in the Homeyer collection.

NUCIFRAGA CARYOCATACTES (L.).

The Thick-billed Nutcracker, the *Nucifraga brachyrhyncha* of Brehm, to which the name *N. caryocatactes* of Linnæus should be restricted, is a resident bird in the fir-forests in the easternmost parts of East Prussia. It is so stationary

that it hardly leaves the breeding-district at all, and may be seen there all the year round. It breeds, in spite of snow and ice, early in the year. I found a nest with three half-feathered young birds on the 19th of April, and a clutch of nearly fresh eggs on the 21st of March. The nest was in a fir about 15 feet high, the number of eggs three, as usual. The female did not leave the nest until I knocked against the tree. The species is not at all rare in some of the dense fir-forests, but the nest is extremely difficult to find, chiefly on account of the long and severe winters. I have seen snow lying about four feet deep at the end of March, and even in 1884, when I found the eggs, I had often to walk for hours through half-frozen snow and water. There is a good series of *Nucifraga caryocatactes* in Homeyer's collection. The colour of Prussian specimens is rather light. The moult takes place in June and July.

NUCIFRAGA CARYOCATACTES MACRORHYNCHA (Brehm).

The Slender-billed Nutcracker is merely a bird of passage in East Prussia. It is common in some years, but not seen in others.

GARRULUS GLANDARIUS (L.).

PICA PICA (L.).

Both not rare, except in some districts.

CORVUS CORAX, L.

Not rare, but not in large numbers. More plentiful in winter.

CORVUS FRUGILEGUS, L.

There are not many rookeries in East Prussia.

CORVUS CORNIX, L.

The Hooded Crow is the common Crow, and is a stationary bird all the year round.

(It has been stated twice (J. f. O. 1884, p. 94, and some years later in the 'Beobachtungsstationen-Berichte' in the same Journal) that *Corvus corone* breeds in East Prussia, but these statements are incorrect. The Carrion-Crow is common

in Germany east of the Elbe, but no straggler has yet been observed in East Prussia.)

COLÆUS MONEDULA (L.).

There are very few places in East Prussia where the Jackdaw breeds. But in autumn, with the first snows, hundreds of thousands generally arrive from the east, and stay there for the winter. During the night many roost on the tops of large buildings, others in trees. They feed almost everywhere, chiefly on rubbish. These winter visitors have generally rather paler necks than those from other parts of Germany, and do not differ from specimens from Moscow. The difference, however, between the forms from Moscow and those from Western Germany is hardly perceptible, and not at all constant. Many western specimens are equally pale, and therefore it seems to be impossible to separate them, even subspecifically.

LANIUS COLLURIO, L.

Very common everywhere.

LANIUS SENATOR, L.

Very rare, and perhaps only a straggler. A specimen shot near Königsberg is in the museum of that town, and it breeds in several places in West Prussia.

LANIUS EXCUBITOR, L.

Common from October to April. It breeds, no doubt, but I cannot verify the fact, as it is very rare in the breeding-season.

The so-called *Lanius major* is nearly as common as the true *L. excubitor*, and specimens are not rare which it is difficult to classify under either of the two supposed forms. These forms are, in my opinion, certainly not more than subspecies, and possibly only varieties.

LANIUS MINOR, Gm.

A common bird from May to the end of August. The eggs are to be found at the end of May and in June. The nest is always placed at some height in the trees, and is invariably lined with some strongly-smelling plant, such as

lavender, thyme, &c. ; and white-coloured plants are much liked.

MUSCICAPA PARVA, Bechst.

Is not to be found in most localities in East Prussia, being an inhabitant of forests of beech and hornbeam (*Fagus sylvatica* and *Carpinus betulus*). Herr Robitzsch, however, found it breeding near Norkitten, in the district of Insterburg.

MUSCICAPA GRISOLA, L.

Common from the beginning of May to September. Eggs are found at the end of May and in June.

MUSCICAPA ATRICAPILLA, L.

Plentiful on migration at the end of April and in September, but comparatively rare during the breeding-season.

AMPELIS GARRULUS, L.

The Waxwing comes *every year* to East Prussia; at least I was able to verify its occurrence in every winter from 1879 to 1886, and in 1889 and 1890. In some winters considerable numbers are seen, while they are very scarce in others. There are certain places where the bird may always be found as long as there are any in the country. They are especially fond of the berries of *Viscum album*, and in searching for Waxwings one should be on the look-out for mistletoe. They are also fond of the berries of *Vaccinium oxycoccos*, and I have seen them eating these berries on the moor, the only occasion on which I have seen them descend to the ground.

CHELIDON URBICA (L.).

HIRUNDO RUSTICA, L.

CLIVICOLA RIPARIA (L.).

All three species of Swallow are common. A hill near Pillau has its name (Schwalbenberg) from the immense numbers of *Clivicola riparia* which frequent it. Before the Swallows leave the country, incredible numbers associate to sleep in the reeds of the Frische Haß, and it is quite exciting to see them, and to hear them rising on wing with a sound like thunder.

[To be continued.]